

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (*Currently Amended*) A phase shifted binary transmission encoder with a data input and a data output, where the phase shifted binary transmission encoder ~~comprises:~~includes an exclusive OR ~~or~~ gate comprising ~~having~~ two inputs and an output, the output of the exclusive OR ~~or~~ gate being the data output of the phase shifted binary transmission encoder, and first and second transparent D flip-flops connected to a clock input, wherein ~~where~~ one input of the exclusive OR ~~or~~ gate is connected with the data output via the ~~a~~ first flip-flop and the other input of the exclusive OR ~~or~~ gate is connected with the data input via the ~~a~~ second flip-flop, wherein a read-in pulse of the first and second flip-flops lies within one bit of the data input signal and is shorter than the delay within the exclusive OR gate ~~both flip-flops being connected with a clock input, wherein the flip-flops are transparent D flip-flops.~~

2. (*Original*) A phase modulator comprising the phase shifted binary transmission encoder according to claim 1.

3. (*Original*) An optical network element comprising a phase modulator according to claim 2 for phase shaped binary transmission.